

Atty. Docket No. YOR-2000-0006
(590.006)

REMARKS

Applicant and the undersigned are most grateful for the time and effort accorded the instant application by the Examiner. The Office is respectfully requested to reconsider the rejections presented in the outstanding Office Action in light of the following remarks.

Claims 3-11 and 14-23 were pending in the instant application at the time of the outstanding Office Action. Claims 3, 14, and 23 are independent claims; the remaining claims are dependent. Claims 3, 14, and 23 have been rewritten. Applicants intend no change in the scope of the claims by the changes made by these amendments. It should also be noted these amendments are not in acquiescence of the Office's position on allowability of the claims, but merely to expedite prosecution.

Claims 3-5, 7-11, 14-16 and 18-23 now stand rejected under 35 U.S.C. 103(a) over Picone et al. (hereafter "Picone") in view of Setlur et al. (hereafter "Setlur") in further view of Fisher. The Office has admitted that not one of these references describe the present invention, but claims that combination of the teachings of these references would be obvious to a person skilled in the art. This is not supported by the references. Reconsideration and withdrawal of the present rejection is therefore respectfully requested.

The comments previously made regarding the present invention are equally applicable here. The present invention generally relates to methods and apparatus for verifying spoken passwords and sentences. (Page 1, lines 3-5) In accordance with at

Atty. Docket No. YOR-2000-0006
(590.006)

least one presently preferred embodiment of the present invention, a proposed method permits the verbal verification of a spoken password sentence (as opposed to the use of acoustic thresholds) to verify a spoken password sentence without computationally extensive large-vocabulary decoding. (Page 3, lines 9-12) A decoder preferably uses target baseforms (representing the original content to be verified) together with a special set of competing simplified baseforms that may be easily constructed using finite-state grammars (FSG). (Page 3, lines 12-15) Thus, in accordance with at least one embodiment of the present invention, a significant difference with respect to previous efforts is that the implicit password search within the decoder allows for a very low decoding complexity. (Page 12, lines 15-17)

As best understood, Picone et al. appears to be directed to a voice log-in system based on a person's name input only, using speaker-dependent **acoustic** name recognition models in performing speaker-independent name recognition. (Abstract; emphasis added) There simply is no teaching or suggestion of using finite state grammars as in the present invention.

As best understood, Setlur et al. appears to be directed automatic speech recognition and particularly to a method and apparatus for verifying one or more words of a sequence of words. (Col. 1, lines 6-8) "Likelihood ratios" or acoustic scores or used to determine whether a spoken string will be accepted or rejected. (Col. 3, lines 4-30) In this regard it should be noted that the spoken "strings" of Setlur et al. appear to be nothing more than concatenations of various acoustic models. Again, there simply is no

Atty. Docket No. YOR-2000-0006
(590.006)

teaching or suggestion of using finite state grammars as in the present invention. Instead, Setlur et al. appears to utilize a classic approach to acoustic scoring.

As best understood, Fisher et al. appears to be directed to a speech recognition system which addresses the problem of Continuous Word Recognition (CWR). As noted in Fisher et al., the input speech signals are preferably digitized signals and a word hypothesizer operates by obtaining the Principal Feature Vector (PFV) and then comparing the PFV with PFV parameters stored in vocabulary reference templates. (Col. 2, lines 33-40) The word hypotheses are then provided to a sentence recognizer which appears to preferably use a finite state grammar to provide "context rules". (Abstract)

The instantly claimed invention requires specifically, *inter alia*, "a decoder which transforms a verbal utterance into decoded text for being compared to the at least one target password sentence in said acceptance arrangement, wherein said transformation comprises transcribing the verbal utterance when the verbal utterance comprises the target password; and a finite state grammar generator which generates a finite state grammar to be employed by said decoder". (Claim 1; emphasis added) Similar language appears in the other independent claims. As discussed in the present application, when the verbal utterance does not include the target password, the verbal utterance is transformed into something other than a transcription of the utterance. (Page 8, lines 9-12) At a minimum, neither Picone et al., Setlur et al., or Fisher et al. teach or suggest using a finite state grammar employed in a decoder to transcribe the verbal utterance when the verbal utterance includes the target password.

Atty. Docket No. YOR-2000-0006
(590.006)

While the outstanding rejection is based on the combination of Picone et al., Setlur et al., and Fisher et al., nearly twenty years ago, the Court of Appeals for the Federal Circuit recognized the importance of the individual references in characterizing the holding of *In re Imperato*, 179 USPQ 730 (C.C.P.A. 1973), as follows:

The lesson of this case appears to be that prior art referenced in combination do not make an invention obvious unless something in the prior art references would suggest the advantage to be derived from combining their teachings.

Again, in *ACS Hospital Systems, Inc. v. Montifore Hospital*, 221 USPQ 929 (Fed. Cir. 1984), the Court stated:

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under section 103, teachings of reference can be combined **only** if there is some suggestion or incentive to do so. The prior art of record fails to provide any such suggestion or incentive. Accordingly, we hold the Court below erred as a matter of law in concluding the claimed invention would have been obvious to one of ordinary skill in the art under section 103.

These Federal Circuit teachings are especially cogent here given the combination of Picone et al., Setlur et al., and Fisher et al. fails to teach or suggest the instantly claimed invention.

In view of the foregoing, it is respectfully submitted that Claims 3-11 and 14-23 fully distinguish over the applied art and are thus in condition for allowance. By virtue of dependence from what is believed to be allowable independent Claims 3 and 14, it is respectfully submitted that Claims 4-11 and 15-22 are also presently allowable. Applicants acknowledge that Claims 6 and 17 were indicated by the Examiner as being

Atty. Docket No. YOR-2000-0006
(590.006)

allowable if rewritten in independent form. Applicant reserves the right to file new claims of such scope at a later date that would still, at that point, presumably be allowable.

The "prior art made of record" has been reviewed. Applicant acknowledges that such prior art was not deemed by the Office to be sufficiently relevant as to have been applied against the claims of the instant application.

In summary, it is respectfully submitted that the instant application, including Claims 3-11 and 14-23, is presently in condition for allowance. Notice to the effect is hereby earnestly solicited. In the unlikely event there are any further issued in this application, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,



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